IAP12 Rec'd PCT/PTO 1 5 JUN 2006

540947 SEQUENCE LISTING

	<110>	Agrinomics LLC					
	<120>	GENERATION OF PLANT	'S WITH ALTERED	OIL CONTENT			
	<130>	6616-72631-06					
<150> PCT/US2004/042750 <151> 2004-12-17							
	<150> <151>	, ,					
	<160>	4					
	<170> PatentIn version 3.2						
	<210><211><211><212><213>	1 981 DNA Arabidopsis thalian	ıa				
	<400>	1 catt caaaaaccga agaa	acacco ataaacoa	ag aacaagggtc	aacaaattca	60	
		agca gaagcaatga agag				120	
		gagt toggactaac ggag				180	
		gcc aatctaagct aact				240	
		aacg gatttcaaac acca			·	300	
		ctg ttgcaaagaa aago				360	
		agag tgaaatacgg ttgt				420	
		ggat ttagcaacaa tgcc				480	
		gate etteateate ttgt				540	
		atgg gaaaatcaga ggtt				600	
		gatt caggtgtaga cagt				660	
		aca ctcatgtttt gcct				720	
		attg ctgatttggt atgt				780	
		ccgg tottaatcaa ctcg				840	
						900	
		aaac actataaaga acat				960	
		agaa gtataactgg agat	agecca ceggeeda	aa ccaccaaacc	cyccyyacaa		
	aayyta	cata aagacacatg a				981	

<210> 2

<211> 326

<212> PRT

<213> Arabidopsis thaliana

<400> 2

Met Asp Tyr Ser Lys Thr Glu Glu Thr Pro Ile Asn Glu Glu Gln Gly
1 5 10 15

Ser Thr Asn Ser Ser Glu Ser Arg Ser Asn Glu Glu Leu Phe Ser Asp 20 25 30

Cys Asp Gln Gln His Ser Ser Ile Ala Asn Glu Phe Gly Leu Thr Glu
35 40 45

Leu Pro Lys Asp Asp Lys Val Tyr Glu Leu Ile Tyr Arg His Cys Gln 50 55 60

Ser Lys Leu Thr Ser His Leu Ser Asn Gln Phe Glu Ile Val Ser Ile 65 70 75 80

Leu Lys Asn Gly Phe Gln Thr Pro Leu Gly Gln Ala Lys Leu Lys Ala 85 90 95

Phe Gln Ile Tyr Ala Glu Ser Val Ala Lys Lys Ser Gly Ser Cys Cys 100 105 110

Gly Asn Lys Ala Ala Val Ala Glu Ala Ala Arg Val Lys Tyr Gly Cys 115 120 125

Cys Gly Val Glu Lys Glu Glu Leu Lys Ala Ile Leu Met Tyr Gly Phe 130 135 140

Ser Asn Asn Ala Leu Cys Leu Ser Pro Asp Asn Ala Pro Leu Gln Cys 145 150 155 160

Met Ile Asp Pro Ser Ser Ser Cys Asn Glu Asp Gly Ile Ser Phe Leu 165 170 175

Leu Phe Ser Arg Ile Ile Met Gly Lys Ser Glu Val Val Cys Ser Thr 180 185 190

Ser Gln Ser Tyr Pro Ser Ser Met Glu Phe Asp Ser Gly Val Asp Ser 195 200 205

540947 Leu Thr Ser Pro Asn Lys Tyr Ile Ile Trp Ser Thr His Met Asn Thr 215 His Val Leu Pro Glu Phe Val Val Cys Ile Lys Thr Pro Ser Ile Leu 235 Lys Arg Ile Ala Asp Leu Val Cys Leu Phe Asp Ile Glu Asn Pro Lys 250 Ser Pro Trp Ile Ser Phe Pro Val Leu Ile Asn Ser Ile Ser Lys Phe 260 265 Leu Asn Gln Ser Gln Ile Arg Leu Ile His Lys His Tyr Lys Glu His 280 Gln Asp Arg Arg Ile Ser Arg Cys Glu Leu Ile Gln Arg Leu Arg Ser Ile Thr Gly Asp Ser Leu Leu Val Gln Ile Ile Lys Ser Val Gly Gln 305 310 315 Lys Val His Lys Asp Thr <210> <211> 770 <212> DNA <213> Arabidopsis thaliana <400> 3 ggcggtgttt cgggcagtgg agtcgtggtg gcaccaccac caccaccac acaacaacaa 60 caacgtggtt ttttcgttag gcttggagaa ggtgacgtgg ttcacgatct tatcaagaca 120 aggtttattc gtggcctcgg catgctcggg cctaaaaccg aggttgtctc cgttcgccga 180 aacgcgtgct ccgacgtcgt ttcacaggcg cgccttcact cgtttcatgc tcacgccagg 240 geggtggega ggeteegegg eggegggaat catgecaaeg tgaagtaege etggtategt 300 acgaacggcg aggacgacgt gaacgacatc gtttcgcaag gcttcggctt cgcgcacggc 360 ccgaaactcg ttctctcccc tgacgacgct cctctccaaa gtgcgagagg gtgtggggtt 420 gggaaggacg gtgtgaggca cgcgttactg tgccgcgtga ttctagggag atcagagatt 480 gttcgtgata acacagaaca ctgctatccg agttgtgaag agtatgattc tggagtggat 540 agtttttcgg ggcctacaaa gtacatcatt tggagcaatc gcatgaacac tcatqttttq 600

660

cctgcgtatg ttgtaagctt cagagtttct tccttcaaag ggatggagaa gagtgaagaa

540947

gaacctttga gacctacttc gccttggatg ccattcccaa ctctgatttc tgcgctttca	720
aggttttgcc tccatgtgat attgccctca tctccaagtt ctacaaagat	770
<210> 4 <211> 1162 <212> DNA <213> Arabidopsis thaliana	
<400> 4 aaacgctttg agtttgagac tacactacaa cagttgctca gctcatctcc ctcccttttg	60
acaccttggg tctggccatg tcgacaaagc atatgtgctc cataaatttc tcaaaagaca	120
aggoggotta aactaatott actoggotac toccootoco tottoccooo ttgogagtgo	180
tcttgctagc ccagctgctg ctgctgccat cgatgggggc tctcttctgg tggtgaagcc	240
tcattattgt agaaaccaat atcttatcac cgactatttg cctcatccgt accaccaggt	300
egeteegget cateetette etettgaatt etteatagta tetgatgace aacteeatgt	360
ccgaacgagg cactttcgtg gaaatagcag caaaaagcat cgaaaagggc atccatggtg	420
aggaggggc ccttggagca cgccccagcc taggtgcttc ttgttcgaca ccacaaggcg	480
cgaacctatc ctccttggtt agattgtctc gagaaccaga acttatgatc tcagatatgt	540
tgggcacgct atccttcaag cccgaacatt cattggtcac gagaggtgct tggacaataa	600
cagcatattc agcatatatg tgtttatgca cattagcatc ccatacgatg taattctgtg	660
gattttgaag atcatccaca ccattatcaa aacttccatt ggatggctga aattgctttg	720
atccaggcaa aacaacctca acattaccca ttattacacg gcacaacatc attctgatga	780
tgccatcttc atgaaaatca gaatatctgg cacatgaatt tgtacagttt gcaggagcaa	840
gacaagtccc aacaccacaa atggacccct tatgaggctt cgcgatttcc agagcacccc	900
gcattgccat ctgctccatg gtatatcttg agcaaggaag ccaagcataa cgtacatttg	960
cattececeg acgaetectg gtetettega teteettetg gaagagaeca caacgaaett	1020
gccctcgctg atctagcagt ggtgttctat agataccaat aatatcttcc tcactaaacg	1080
gctgacctaa tcctttgagc aacaaattcc gcacagctga atcaatacgt cgacaatcgt	1140
ttggcttgcc agtagcttgc tc	1162

SEQUENCE LISTING IAP12 Rec'd PCT/PTO 1 5 JUN 2006

<110>	<110> Agrinomics LLC					
<120>	<120> GENERATION OF PLANTS WITH ALTERED OIL CONTENT					
<130>	<130> AG04-048C-PC					
<150> <151>						
<160>	4					
<170>	<170> PatentIn version 3.2					
<210> <211> <212> <213>	<211> 981 <212> DNA					
<400>	1	60				
	tatt caaaaaccga agaaacaccg ataaacgaag aacaagggtc aacaaattca	60				
	agca gaagcaatga agagttattc tctgattgtg atcaacaaca ttcttccata	120				
	gagt teggaetaae ggagttgeet aaagaegata aagtttaega gettatetae	180				
	tgcc aatctaagct aacttctcac ttaagcaatc agtttgagat tgtatcaatt	240				
ctcaaga	aacg gatttcaaac accattagga caagctaagc ttaaagcctt tcaaatatac	300				
gctgagt	tctg ttgcaaagaa aagcggcagc tgctgtggaa acaaagctgc ggtggctgaa	360				
gcggcga	agag tgaaatacgg ttgttgcggt gtggagaagg aagagttaaa agcgattcta	420				
atgtatg	ggat ttagcaacaa tgccttatgt ctctcaccag acaatgctcc tcttcaatgt	480				
atgatag	gatc cttcatcatc ttgtaacgaa gacgggatta gcttcttgct gttttcaaga	540				
attatta	atgg gaaaatcaga ggttgtgtgc tcgacatcac aatcgtatcc gagttctatg	600				
gagtttg	gatt caggtgtaga cagtttgaca tctccaaaca agtatattat ttggagcaca	660				
cacatga	aaca ctcatgtttt gcctgagttt gttgtttgca tcaaaactcc atctatcttg	720				
aaaagaa	attg ctgatttggt atgtttattt gatatagaaa acccgaaatc tccttggatt	780				
tcgtttc	ccgg tcttaatcaa ctcgatatca aagtttctaa atcaatcgca aatccgtctc	840				
attcata	aaac actataaaga acatcaagat aggagaatct cgcggtgtga gttgattcaa	900				
cgcctga	ngaa gtataactgg agatagctta ttggttcaaa tcatcaaatc tgttggacaa	960				
aaggtad	cata aagacacatg a	981				
<210> 2 <211> 326 <212> PRT <213> Arabidopsis thaliana						

<400> 2

Met Asp Tyr Ser Lys Thr Glu Glu Thr Pro Ile Asn Glu Glu Gln Gly 10 15

Ser Thr Asn Ser Ser Glu Ser Arg Ser Asn Glu Glu Leu Phe Ser Asp Page 1

AG04-048C-PC.txt

30

20

Cys Asp Gln Gln His Ser Ser Ile Ala Asn Glu Phe Gly Leu Thr Glu 35 40 45 Leu Pro Lys Asp Asp Lys Val Tyr Glu Leu Ile Tyr Arg His Cys Gln 50 60 Ser Lys Leu Thr Ser His Leu Ser Asn Gln Phe Glu Ile Val Ser Ile 65 70 75 80 Leu Lys Asn Gly Phe Gln Thr Pro Leu Gly Gln Ala Lys Leu Lys Ala 85 90 95 Phe Gln Ile Tyr Ala Glu Ser Val Ala Lys Lys Ser Gly Ser Cys 100 105 110Gly Asn Lys Ala Ala Val Ala Glu Ala Ala Arg Val Lys Tyr Gly Cys 115 120 125 Cys Gly Val Glu Lys Glu Glu Leu Lys Ala Ile Leu Met Tyr Gly Phe 130 140 Ser Asn Asn Ala Leu Cys Leu Ser Pro Asp Asn Ala Pro Leu Gln Cys 145 150 155 160 Met Ile Asp Pro Ser Ser Ser Cys Asn Glu Asp Gly Ile Ser Phe Leu 165 170 175 Leu Phe Ser Arg Ile Ile Met Gly Lys Ser Glu Val Val Cys Ser Thr 180 185 190 Ser Gln Ser Tyr Pro Ser Ser Met Glu Phe Asp Ser Gly Val Asp Ser 195 200 205 Leu Thr Ser Pro Asn Lys Tyr Ile Ile Trp Ser Thr His Met Asn Thr 210 215 220 His Val Leu Pro Glu Phe Val Val Cys Ile Lys Thr Pro Ser Ile Leu 225 230 235 240 Lys Arg Ile Ala Asp Leu Val Cys Leu Phe Asp Ile Glu Asn Pro Lys 245 250 255 Ser Pro Trp Ile Ser Phe Pro Val Leu Ile Asn Ser Ile Ser Lys Phe 260 265 270 Leu Asn Gln Ser Gln Ile Arg Leu Ile His Lys His Tyr Lys Glu His 275 280 285

Gln Asp Arg Arg Ile Ser Arg Cys Glu Leu Ile Gln Arg Leu Arg Ser

Page 2

770

AG04-048C-PC.txt 290 295 300

Ile Thr Gly Asp Ser Leu Leu Val Gln Ile Ile Lys Ser Val Gly Gln 305 310 315

Lys Val His Lys Asp Thr 325

<210> 3 <211> 770 <212> DNA <213> Arabidopsis thaliana

<400> ggcggtgttt cgggcagtgg agtcgtggtg gcaccaccac caccaccacc acaacaacaa 60 caacgtggtt ttttcgttag gcttggagaa ggtgacgtgg ttcacgatct tatcaagaca 120 aggtttattc gtggcctcgg catgctcggg cctaaaaccg aggttgtctc cgttcgccga 180 aacgcgtgct ccgacgtcgt ttcacaggcg cgccttcact cgtttcatgc tcacgccagg 240 gcggtggcga ggctccgcgg cggcgggaat catgccaacg tgaagtacgc ctggtatcgt 300 acgaacggcg aggacgacgt gaacgacatc gtttcgcaag gcttcggctt cgcgcacggc 360 ccgaaactcg ttctctcccc tgacgacgct cctctccaaa gtgcgagagg gtgtggggtt 420 gggaaggacg gtgtgaggca cgcgttactg tgccgcgtga ttctagggag atcagagatt 480 gttcgtgata acacagaaca ctgctatccg agttgtgaag agtatgattc tggagtggat 540 agtttttcgg ggcctacaaa gtacatcatt tggagcaatc gcatgaacac tcatgttttg 600 cctgcgtatg ttgtaagctt cagagtttct tccttcaaag ggatggagaa gagtgaagaa 660 gaacctttga gacctacttc gccttggatg ccattcccaa ctctgatttc tgcgctttca 720

aggttttgcc tccatgtgat attgccctca tctccaagtt ctacaaagat

<210> 4 <211> 1162 <212> DNA <213> Arabidopsis thaliana

<400> aaacgctttg agtttgagac tacactacaa cagttgctca gctcatctcc ctcccttttg 60 acaccitiggg tctggccatg tcgacaaagc atatgtgctc cataaatttc tcaaaagaca 120 aggcggctta aactaatctt actcggctac tccccctccc tcttcccccc ttgcgagtgc 180 tcttgctagc ccagctgctg ctgctgccat cgatgggggc tctcttctgg tggtgaagcc 240 tcattattgt agaaaccaat atcttatcac cgactatttg cctcatccgt accaccaggt 300 cgctccggct catcctcttc ctcttgaatt cttcatagta tctgatgacc aactccatgt 360 ccgaacgagg cactttcgtg gaaatagcag caaaaagcat cgaaaagggc atccatggtg 420 aggagggggc ccttggagca cgccccagcc taggtgcttc ttgttcgaca ccacaaggcg 480 cgaacctatc ctccttggtt agattgtctc gagaaccaga acttatgatc tcagatatgt 540

WO 2005/058019 PCT/US2004/042750

••			AGU4-U48C-P	C.txt		
tgggcacgct	atccttcaag	cccgaacatt	cattggtcac	gagaggtgct	tggacaataa	600
cagcatattc	agcatatatg	tgtttatgca	cattagcatc	ccatacgatg	taattctgtg	660
gattttgaag	atcatccaca	ccattatcaa	aacttccatt	ggatggctga	aattgctttg	720
atccaggcaa	aacaacctca	acattaccca	ttattacacg	gcacaacatc	attctgatga	780
tgccatcttc	atgaaaatca	gaatatctgg	cacatgaatt	tgtacagttt	gcaggagcaa	840
gacaagtccc	aacaccacaa	atggacccct	tatgaggctt	cgcgatttcc	agagcacccc	900
gcattgccat	ctgctccatg	gtatatcttg	agcaaggaag	ccaagcataa	cgtacatttg	960
cattcccccg	acgactcctg	gtctcttcga	tctccttctg	gaagagacca	caacgaactt	1020
gccctcgctg	atctagcagt	ggtgttctat	agataccaat	aatatcttcc	tcactaaacg	1080
gctgacctaa	tcctttgagc	aacaaattcc	gcacagctga	atcaatacgt	cgacaatcgt	1140
ttggcttgcc	agtagcttgc	tc				1162